

Therefore, it is respectfully believed that the drawings do in fact show all of the claimed features, and that the objection should be withdrawn.

***Objection to the Claims***

The Examiner objected to claim 17, pointing out to the Applicant the presence of a typographical error (thank you). Claim 17 has been amended herein to correct the typographical error. It is believed this amendment is truly cosmetic, and thus does not bar the doctrine of equivalents with respect to claims 17. It is believed the objection should be withdrawn.

***Claim Rejections - § 112***

The Examiner rejected claims 18, 20, and 21 under 35 U.S.C. § 112, first paragraph.

The Examiner asserted that, regarding claims 18 and 21, “the specification does not provide support for a single embodiment of the invention in which the base station and user stations transmit using two different frequencies and the base station communicates with the user using time division duplexing”. The Examiner further asserted that, regarding claim 20, the specification does not provide adequate support for the limitation “wherein said user stations in said first cell are assigned a second set of one or more distinct spreading codes”.

The Applicant hereby traverses the rejection. First, the Applicant traverses the Examiner’s implication that 35 U.S.C. § 112, first paragraph, requires that all of the claimed elements in a given claim must be described in a single explicit embodiment in the specification. The Applicant hereby kindly requests the Examiner to provide the Applicant the legal basis for this requirement, or to otherwise withdraw the rejection.

The Applicant kindly points the Examiner’s attention to the specification on page 10, line 1, “In a preferred embodiment, time division is *also* used.” (Emphasis added). This sentence, especially the recitation of “also”, teaches that time division may be used in addition to and/or in combination with other embodiments disclosed in the specification. Considered with the teaching of the base station using a first frequency and

the user stations using a second frequency, the recited embodiments are described in the specification.

Regarding, spreading codes, the Examiner's attention is kindly directed to page 7, lines 8-10, "Alternatively, each base station 204 and each user station 202 may be assigned a *separate code*, which may then be used to identify that station." (Emphasis added). Thus, in at least one embodiment, the base station and the user stations may have separate codes. In addition, when considered with the claims as filed (see comments below), sufficient description of the claimed embodiments is provided.

Furthermore, the Applicant kindly points the Examiner's attention to the specification, page 12, lines 13-28 through page 13, lines 1-2:

Alternative Embodiments

While preferred embodiments are disclosed herein, many variations are possible which remain within the concept and scope of the invention, and these variations would become clear to one of ordinary skill in the art after perusal of the specification, drawings and claims herein.

For example, it would be clear to one of ordinary skill in the art, after perusal of the specification, drawings and claims herein, that other and further techniques, such as adjustable power control, cell sectoring, directional antennas, and antennae diversity, may be used to enhance a wireless communication system embodying the principles of the invention. Moreover, it would be clear to one of ordinary skill that a system also employing such other techniques would be workable, and is within the scope of the invention.

Thus, the applicant made clear in the specification that various other combinations of the embodiments of the invention exist. In addition, the Examiner is kindly reminded that:

In establishing a disclosure, applicant may rely not only on the description and drawings as filed but also on the original claims if their content justifies it. MPEP 608.01(I).

The claims in question were present in the present application as filed on December 31, 1988. The Examiner has not provided any explanation why the Applicant cannot rely on the claims in establish a disclosure. Therefore, the rejection should be withdrawn.

***Claim Rejections - § 102***

The Examiner rejected claims 17, 19, and 20 under 35 U.S.C. § 102(b) as being anticipated by Schmidt (4,765,753).

In support of the rejection of claim 17, the Examiner cited to col. 2, lines 26-35 and col. 3, lines 1-8 of Schmidt. However, contrary to the Examiner's assertion, Schmidt does not teach, among other things, that *"radio signals used in said first cell are spread across a bandwidth sufficiently wide that receivers in a second cell, said second cell being adjacent to said first cell, may distinguish communication which originates in said first cell from communication which originates in said second cell"* as recited in claim 17. Furthermore, Schmidt does not teach that the base station is assigned a first frequency and that user stations are assigned a second frequency as recited in claims 17 and 19. The Examiner pointed to the recitation of baseband and narrowband transmission in Schmidt. However, Schmidt does not provide any detail on what the actual frequencies are, and never states that the frequencies are first and second frequencies. As a result, Schmidt does not provide sufficient detail to support a 102 rejection. In addition, with respect to claim 20, Schmidt is silent on the spreading codes assigned to adjacent cells. The Examiner is kindly reminded that, in order to support an anticipation rejection:

The identical invention must be shown in as complete detail as in the . . .  
claim. MPEP § 2131.01

Since Schmidt does not disclose the identical invention as recited in the Applicant's claims, the rejection should be withdrawn.

***Claim Rejections - § 103***

The Examiner rejected claims 18 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Schmidt in view of well known prior art.

In the rejection the Examiner took Official Notice that "it is well known in the art that time division duplexing allows a transmit channel and a receive channel to use a common frequency band, thereby conserving bandwidth and increasing user capacity. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Schmidt, such that the base station communicates with the user

stations using time division duplexing, in order to increase the user capacity of the wireless system.”

The Applicant traverses the rejection. The Applicant hereby seasonally traverses the Examiner’s taking of Official Notice and kindly requests the Examiner to provide a reference in support of the assertion in the Notice, or to otherwise withdraw the rejection.

If the applicant traverses such an assertion the examiner should cite a reference in support of his or her position. MPEP 2144.03

If the Examiner is basing the Official Notice on the Examiner’s personal knowledge, the Applicant hereby kindly calls upon the Examiner to set forth the facts in an Examiner’s affidavit or to otherwise withdraw the rejection.

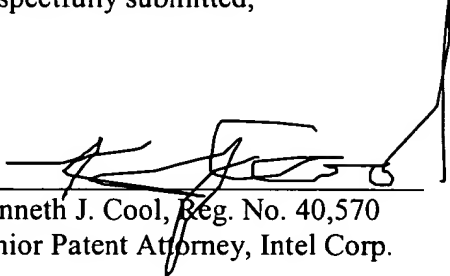
When a rejection is based on facts within the personal knowledge of the examiner, the data should be stated as specifically as possible, and the facts must be supported, when called for by the applicant, by an affidavit from the examiner. MPEP 2144.03; 37 CFR 1.104(d)(2).

Furthermore, the Applicant asserts that, even if the subject matter of the Official Notice is correct or otherwise supported by a reference or affidavit, the subject matter of the Official Notice and the patent to Schmidt do not render the Applicant’s claims as obvious. As pointed out with respect to independent claims 17 and 19, above, Schmidt in fact does not teach all of the limitations of the claims. Furthermore, nothing in the Examiner’s statement regarding time division duplexing teaches or suggests combining a code-division system with a time duplexing system, in combination, as recited in the claims, nor does it establish a reasonable likelihood of success. It is therefore believed that the rejection should be withdrawn.

CONCLUSION

In light of the foregoing, reconsideration and allowance of the claims is hereby earnestly requested.

Respectfully submitted,



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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

17. (amended) A multiple user wireless communication system, comprising:  
a plurality of cells;  
a base station located in each cell;  
wherein transmitters in a first cell are assigned a first code for modulating radio communication in said first cell;  
whereby radio signals used in said first cell are spread across a bandwidth sufficiently wide that receivers in a second cell, said second cell being adjacent to said first cell, may distinguish communication which originates in said first cell from communication which originates in said second cell;  
whereby said first cell using said first code is not adjacent to any other cell using said first code;  
wherein said base station transmits over a first frequency; and  
wherein said user [staitons] stations in communication with said base station transmit over a second frequency different from said first frequency.